



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1350
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/604,705

08/12/2003

Alianna J. Maren

1704

37829

7590

02/13/2006

EAGLEFORCE ASSOCIATES, INC.
2010 CORPORATE RIDGE
MCLEAN, VA 22102

EXAMINER

PHAM, KHANH B

ART UNIT

PAPER NUMBER

2166

DATE MAILED: 02/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,705

Applicant(s)

MAREN ET AL.

Examiner

Khanh B. Pham

Art Unit

2166

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-34 is/are rejected.
- 7) ☒ Claim(s) 27 and 32 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>8/12/2003</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Preliminary Amendment

1. The preliminary amendment filed October 25, 2004 has been entered. Claims 1-16 have been canceled. Claims 17-34 have been added. Claims **17-34** are pending in this Office Action.

Specification

2. The disclosure is objected to because of the following informalities: the references to claims 8 and 13 at page 18, [0048] should be deleted.

Claim Objections

3. **Claim 27** is objected to because of the following informalities: Claim 27 recites the limitation "the elements in **the** database" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

4. **Claim 32** is objected to because of the following informalities: Claim 32 recites the limitation "the matrix" in line 2. There is insufficient antecedent basis for this limitation in the claim. For purposes of examination, the examiner presumes claim 32 depends upon claim 31, which provides antecedent basis for "the matrix". Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. **Claims 17-28, and 33** are rejected under 35 U.S.C. 102(e) as being anticipated by Blair et al. (US 2002/0007373A1), hereinafter “Blair.”

As per claim 17, Blair teaches a system for identifying elements in a dataset including structured, semi-structured or unstructured data comprising a plurality of elements from a plurality of data sources, wherein each of the plurality of elements includes at least one corresponding metatag indicative of content of the corresponding element (Figs. 3, 19), comprising:

- “a plurality of processing levels, wherein each processing level includes a processor configured to identify a group of elements that satisfy a set of criteria” at page 5, [0101]-[0103] and Fig. 30;
- “and a filter configured to extract a subset of the group of elements identified by the processor that satisfy a selection criteria and provide the subset of elements to a next processing level” at page 5, [0112]-[0114];
- “a feedback component configured to provide a feedback loop between two of the processing levels at Figs. 30, 37;

- “wherein the feedback component is configured to provide a portion of the group of elements identified by one of the processing levels to another one of the processing levels” at at page 5,[0105], [0114], [0118] and Figs. 30, 37;
- “so that the processing level receiving the portion of the group of elements identifies a new group of elements contained in the portion of the group of elements provided by the feedback component” at page 5,[0105], [0114].

As per claim 18, Blair teaches the system of claim 17, further comprising: “a utility component configured to control the feedback component, wherein the utility component is configured to determine which portion of the elements are provided to a particular one of the processing levels” at page 5, [0112]-[0114].

As per claim 19, Blair teaches the system of claim 18, wherein “the utility component is configured to determine the number of times the feedback component provides the portion of the group of elements to the particular processing level” at page 5, [0118].

As per claim 20, Blair teaches a system for identifying elements in a dataset including structured, semi-structured unstructured data comprising a plurality of elements from a plurality of data sources, wherein each of the plurality of elements includes at least one corresponding metatag indicative of content of the corresponding element (Figs. 3, 19), comprising:

- “a plurality of processors, wherein each processor is configured to identify a group of elements that satisfy a set of criteria” at page 5, [0112]-[0114] and Fig. 30;
- “a plurality of filters, wherein each filter is configured to extract a subset of the group of elements identified by one of the processors that satisfy a selection criteria and provide the subset of elements to a next one of the plurality of processors” page 5, [0101]-[0103], [0112]-[0114] and Fig. 30;
- “a feedback component configured to provide a feedback loop between two of the plurality of processors, wherein the feedback component is configured to provide a portion of the group of elements identified by one of the plurality of processors to another one of the plurality of processors such that the processor receiving the portion of the group of elements identifies a new group of elements contained in the portion of the group of elements provided by the feedback component” at page 5, [0105], [0114], [0118], page 12, [0373]-[0392] and Figs. 30, 37.

As per claim 21, Blair teaches the system of claim 20, wherein “the feedback component is configured to provide feedback loops between more than two of the plurality of processors” at Fig. 30.

As per claim 22, Blair teaches the system of claim 20, wherein “a different set of criteria is employed by each of the plurality of processors” at page 5, [0102] and page 12, [0373]-[0392].

As per claim 23, Blair teaches the system of claim 20, wherein “the selection criteria employed by each of the plurality of filters is different” at page 5, [0102].

As per claim 24, Blair teaches the system of claim 20, wherein “the selection criteria is different than the set of criteria” at page 5, [0102].

As per claim 25, Blair teaches the system of claim 20, further comprising: “a utility component configured to control the feedback component, wherein the utility component is configured to determine which portion of the elements are provided to a particular one of the plurality of processors” at page 5, [0112]-[0114].

As per claim 26, Blair teaches the system of claim 25, wherein “the utility component is configured to determine the number of times the feedback component provides the portion of the group of elements to the particular processor” at page 5, [0118].

As per claim 27, Blair teaches the system of claim 23, further comprising: “a tagging processor configured to assign one or more metatags to each of the elements in the database” at page 3, [0073]-[0074].

As per claim 28, Blair teaches the system of claim 20, wherein “the set of criteria employed by each of the processors either set by a user or set automatically” at page

Art Unit: 2166

13, [0409]-[0412].

As per claim 33, Blair teaches the system of claim 20, wherein “the set of criteria employed by at least one of the processors is based on syntactic associations of elements in the dataset” at page 5, [0102].

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. **Claims 29-32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Blair as applied to claims above, and in view of Lindh et al. (US 2005/0149494 A1), hereinafter "Lindh".

As per claim 29, Blair teaches the system of claim 20 as discussed above. Blair teaches different types of searching including lexical, Syntactic and Semantic, but does not explicitly teach "the set of criteria employed by at least one of the processors is based on the pairwise association of the data elements." However, Lindh teaches a similar method for document processing based on a set of criteria, wherein "the set of criteria is based on the pairwise association of data element" at page 1, [0009]-[0010]. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Blair and Lindh's teachings, in order to improve document classification and searching, as suggested by Lindh. Lindh suggested the use of the "term-term" matrix at page 1, [0010] because "it provides accurate connections between synonymous terms and related expression. This is in turn, constitute a basis for accomplishing high quality document searches, i.e., searches in which highly relevant information is identified."

As per claim 30, Blair and Lindh teach the system of claim 29 as discussed above. Lindh also teaches: "wherein the pairwise associations are based on nouns or noun phrases among the elements of the group" at page 2, [0026] and page 4, [0057]-[0060].

As per claim 31, Blair and Lindh teach the system of claim 30 discussed above.

Lindh also teaches: “wherein at least one of the processors generates a pairwise occurrence matrix” at page 3, [0036], “wherein each element of the matrix being incremented when a pair of nouns or noun phrases occur within a set distance of each other” at page 2, [0026] and page 4, [0057]-[0060].

As per claim 32, Blair and Lindh teach the system of claim 20 as discussed above. Lindh also teaches: “wherein the selection criteria includes establishing a threshold that is used to select elements of the matrix that have been incremented to at least equal the value of the threshold” at page 8, [0119]-[0125].

10. **Claim 34** is rejected under 35 U.S.C. 103(a) as being unpatentable over Blair as applied to claims above, and in view of Zernik (US 5,383,120 A), hereinafter “Zernik”.

As per claim 34, Blair teaches the system of claim 33 as discussed above. Blair teaches different types of searching including lexical, Syntactic and Semantic, but does not explicitly teach wherein “the syntactic associations are based on noun-verb associations and verb-object noun associations among the elements of one of the subsets extracted by one of the plurality of filters”. However, Zernik teaches a similar method for document analysis based on the word pairs occurring in the documents (Col. 2 lines 50-67), wherein the word pairs are noun-verb and verb-object noun association (Col. 1 lines 65-68 and Col. 5 lines 45-55) Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Blair and

Art Unit: 2166

Zernik's teaching in order to improve document classification and searching based on the thematic content of the documents.

Conclusion

11. The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

If a reference indicated as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose telephone number is **(571) 272-3574** for faster service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Khanh B. Pham
Primary Examiner
Art Unit 2166

January 30, 2006

A handwritten signature in black ink, appearing to read 'Kpham', with a long horizontal flourish extending to the right.